

CLEAN SET OF PENDING CLAIMS

1-97. (Cancelled)

98. (Currently Amended) A method for cleaning a semiconductor wafer comprising:

(a) rotating a wafer in a processing chamber;

(b) ~~contacting~~ spraying a surface of the wafer with a heated aqueous solution to form a thin aqueous film thereon and simultaneously providing ozone gas into a gas/vapor atmosphere within the processing chamber in an amount sufficient to create an oxidizing effect on the surface of the wafer to oxidize contaminants thereon; and

61 (c) removing oxidized contaminants from the surface thereof.

99. (Previously Added) A method as defined in claim 98 wherein the aqueous solution is water.

100. (Previously Added) A method as defined in claim 98 wherein the aqueous solution contains an acid.

101. (Cancelled)

102. (Previously Added) A method as defined in claim 98 wherein the aqueous solution is adjusted to a temperature sufficient to effect oxidation on the surface of the wafer.

103. (Previously Added) A method as defined in claim 98 wherein the contaminants are removed by rinsing.

104. (Previously Added) A method as defined in claim 98 wherein the ozone is injected into the processing chamber.

105. (Previously Added) A method as defined in claim 98 wherein the ozone is admixed with a carrier gas.

61 106. (Previously Added) A method as defined in claim 105 wherein the carrier gas is selected from the group consisting of oxygen, nitrogen, air and inert gas.

107-118. (Cancelled)

119. (Previously Added) The method of claim 98 wherein the ozone is provided as a gas around the semiconductor wafer.

120. (Previously Added) The method of claim 98 wherein the ozone is provided in an ozone/liquid solution.

121. (Previously Added) The method of claim 98 wherein the ozone/liquid solution is supplied separately from the heated aqueous solution.

122. (Previously Added) A method for cleaning organic material from a surface of a workpiece comprising:

- (a) spraying a heated aqueous solution onto the surface of the workpiece and simultaneously contacting the surface with ozone to effect oxidation of the organic materials on the surface of the workpiece to oxidize the contaminants; and
- (b) removing oxidized contaminants from the surface.

123. (Previously Added) The method of claim 122 wherein the aqueous solution comprises water.

61 124. (Previously Added) The method of claim 122 wherein the aqueous solution comprises an acid.

125. (Previously Added) The method of claim 122 wherein the aqueous solution forms a thin aqueous film on the surface of the workpiece.

126. (Previously Added) The method of claim 122 wherein the organic material comprises a photoresist.

127. (Previously Added) A method for cleaning an organic material off of a surface of a semiconductor article comprising:

- placing the article into a processing chamber;

spraying the surface of the article with a heated aqueous solution, while simultaneously contacting the surface of the article with ozone in an amount sufficient to oxidize the organic material;

removing the oxidized organic material from the surface of the article; and

removing the article from the processing chamber without performing a separate rinsing step.

6 / 128. (Previously Added) The method of claim 127 further including the step of rotating the article.

129. (Previously Added) The method of claim 127 wherein the aqueous solution and the ozone are sprayed onto the surface of the article in solution form.

130. (Previously Added) The method of claim 127 wherein the aqueous solution is heated to a temperature between 50° C and 90° C.
